

CLAIMS

What is claimed is:

1. A transport system for advancing containers, in particular of an airport baggage handling system, comprising:
a curve section for defining a curved transport path which is defined by a curve radius;
a container having an underside formed with two longitudinal sidewalls extending in mirror-symmetric relationship and curved at a radius, which corresponds to the curve radius, such that a distance between the sidewalls is at a limit in mid-section of the sidewalls; and
a driving and guiding assembly for advancing and guiding the container along the transport path, said driving and guiding assembly including support elements, which support the underside of the container, and constructed to bear upon at least one of the sidewalls, at least along portions thereof, in a force-locking or form-fitting manner for propulsion of the container.
2. The transport system of claim 1, wherein the sidewalls are curved outwardly so that the distance between the sidewalls is at a maximum in mid-section of the sidewalls.

3. The transport system of claim 1, wherein the sidewalls are curved inwardly so that the distance between the sidewalls is at a minimum in mid-section of the sidewalls.
4. The transport system of claim 1, wherein the driving and guiding assembly includes a roller assembly having rotatable rollers arranged along a curved line in coincidence with the curved transport path.
5. The transport system of claim 4, wherein the rollers are arranged on both sides of the curved line and roll on the sidewalls indirectly, at least along portions thereof.
6. The transport system of claim 1, wherein the sidewalls bound a groove-shaped passageway formed in the underside of the container and extending in transport direction.
7. The transport system of claim 2, wherein the sidewalls bound a groove-shaped passageway formed in the underside of the container and extending in transport direction, said driving and guiding assembly engaging in the passageway and bearing upon the sidewalls, at least along portions thereof.

8. The transport system of claim 4, wherein the driving and guiding assembly has a driving belt, wherein a first plurality of the rollers are disposed inwards in relation to the curve line and roll freely rotatable directly on the sidewalls, and a second plurality of the rollers are disposed outwards in relation to the curve line and propel the driving belt, with the driving belt having an outer side bearing upon a confronting one of the sidewalls in a force-locking or form-fitting manner.
9. The transport system of claim 8, wherein the roller assembly includes a plurality of lever arms, each of the lever arms swingably supporting a corresponding one of the outer rollers for rotation about an axis, whereby the lever arms and the outer rollers are placed into one-to-one correspondence, said lever arms swinging about a pivot axis which extends in parallel relationship to the axis of the rollers between the outer rollers and the inner rollers.
10. The transport system of claim 8, wherein the roller assembly includes fixed secondary rollers disposed along the curve line between the outer rollers and the inner rollers in such a manner that the driving belt has a load strand which runs in a wavy shape along the secondary rollers, wherein the outer rollers are pushed about the pivot axis to the outside during operation of the driving belt to brace the container between the inner rollers and an outer side of the driving belt.

11. The transport system of claim 3, wherein the sidewalls bound a web-like projection formed on the underside of the container and extending in transport direction.
12. The transport system of claim 4, wherein the driving and guiding assembly has a driving belt, wherein a first plurality of the rollers are disposed inwards in relation to the curve line and roll freely rotatable directly on the sidewalls, and a second plurality of the rollers are disposed outwards in relation to the curve line and propel the driving belt, with the driving belt having an outer side bearing upon a confronting one of the sidewalls in a force-locking or form-fitting manner, or vice versa.
13. The transport system of claim 1, wherein the support elements are constructed as ball rollers or sliding surfaces.

14. A curve section for a transport system for advancing containers, comprising:
a curved track for defining a curved transport path which is defined by a curve radius; and
a driving and guiding assembly for advancing and guiding a container along the transport path, said driving and guiding assembly including support elements, which support the underside of the container, and constructed to bear upon a longitudinal sidewall of the container, at least along portions thereof, in a force-locking or form-fitting manner for propulsion of the container.
15. The curve section of claim 14, wherein the driving and guiding assembly includes a roller assembly having rotatable rollers arranged along a curved line in coincidence with the curved transport path.
16. The curve section of claim 15, wherein the rollers are arranged on both sides of the curved line to bear upon the sidewall and an opposite further longitudinal sidewall of the container, at least along portions thereof.
17. The curve section of claim 14, wherein the driving and guiding assembly engages in a passageway of the container to bears upon the sidewall.

18. The curve section of claim 14, wherein the driving and guiding assembly has a driving belt, wherein a first plurality of the rollers are disposed inwards in relation to the curve line and roll freely rotatable directly on the sidewall, and a second plurality of the rollers are disposed outwards in relation to the curve line and propel the driving belt, with the driving belt having an outer side bearing upon a confronting further longitudinal sidewall in a force-locking or form-fitting manner.
19. The curve section of claim 18, wherein the roller assembly includes a plurality of lever arms, each of the lever arms swingably supporting a corresponding one of the outer rollers for rotation about an axis, whereby the lever arms and the outer rollers are placed into one-to-one correspondence, said lever arms swinging about a pivot axis which extends in parallel relationship to the axis of the rollers between the outer rollers and the inner rollers.
20. The curve section of claim 18, wherein the roller assembly includes fixed secondary rollers disposed along the curve line between the outer rollers and the inner rollers in such a manner that the driving belt has a load strand which runs in a wavy shape along the secondary rollers, wherein the outer rollers are pressed about the pivot axis to the outside during operation of the driving belt to brace the container between the inner rollers and an outer side of the driving belt.

21. The curve section of claim 14, wherein the support elements are constructed as ball rollers or sliding surfaces.